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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,270	10/14/2003	Thomas L. Mikes	10004278-1	4933

7590 04/10/2007  
Agilent Technologies, Inc.  
Legal Department, DL 429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

EXAMINER
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HUGHES, JAMES P

ART UNIT	PAPER NUMBER
2883	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/685,270

Applicant(s)

MIKES ET AL.

Examiner

James P. Hughes

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4-18-06, 2-1-07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action follows the decision by the Board of Patent Appeals and Interferences mailed on February 1, 2007.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 6 and 7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Xiang (6,266,140). This rejection was set forth by the Board of Patent Appeals and Interferences pursuant to their authority under 37 CFR § 41.50(b). Xiang discloses the demultiplexing of optical signals in which a concentric spectrometer 110 including an aberration-corrected diffraction grating 100 receives a multi-wavelength optical signal (12, 20, 30, Figure 5). This multi-wavelength optical signal is separated into its constituent parts using the concentric spectrometer 110 (Xiang, column 3, lines 15-33) with the dispersed spectra signals being applied to CCD detector 50.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palumbo et al. (6,181,418) as further evidenced by Xiang (6,266,140). Palumbo teaches a method and apparatus employing a concentric spectrometer (100) comprising an optical fiber (2) interface and a concentric spectrometer (100) coupled to the optical fiber interface. The concentric spectrometer (100) is capable of receiving a multiwavelength signal from an optical fiber (2) coupled to the optical fiber interface and spatially separates the multi-wavelength optical signal into its constituent component optical signals (e.g. on detector 18). Including a concentric diffraction grating (34). (Col. 13, ll. 45 – Col. 14, ll. 65 and Fig. 10-11)

While Palumbo does not explicitly teach an aberration-corrected diffraction grating, it would be obvious to one of ordinary skill in the art at the time of the invention to employ an aberration-corrected diffraction grating in the invention of Palumbo because they are well-known for their use in superior optics and in concentric spectrometers in general as evidenced by Xiang. One would have been motivated to employ such a system to yield a more efficient system.

4. Claims 1, 3-5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. (6,424,413) as further evidenced by Xiang (6,266,140). Weber teaches a method and apparatus employing a concentric spectrometer comprising a plurality of input optical fiber (17a-17d) interfaces where in the concentric spectrometer may multiplex the individual signals from the input fibers. The concentric spectrometer (100) is capable of receiving a multiwavelength signal from an optical fiber (2) coupled to the optical fiber interface and

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spatially separates the multi-wavelength optical signal into its constitution component optical signals (e.g. on detector 18). Including a concentric diffraction grating (34). (Col. 10, ll. 15-67 and Fig. 1a-2a)

While Palumbo does not explicitly teach an aberration-corrected diffraction grating, it would be obvious to one of ordinary skill in the art at the time of the invention to employ an aberration-corrected diffraction grating in the invention of Palumbo because they are well-known for their use in superior optics and in concentric spectrometers in general as evidenced by Xiang. One would have been motivated to employ such a system to yield a more efficient system.

### *Conclusion*

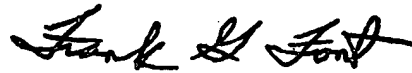
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James P. Hughes whose telephone number is 571-272-2474. The examiner can normally be reached on Monday - Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James P. Hughes  
Patent Examiner  
Art Unit 2883



Frank G. Font  
Supervisory Patent Examiner  
Technology Center 2800